

REMARKS/ARGUMENTS

Claims 14-40 are active. No claim amendments have been made, but Replacement Drawing Sheets for Figs. 1 and 2 are provided. These are the same drawings previously submitted, but have been relabeled to facilitate proper entry and have been identified as "Other than black & white drawings" so the Office will save them into SCORE at a resolution that permits more clear viewing by the Examiner. The Applicants respectfully request that this after-final Amendment be entered by the Examiner to place this application in condition for allowance or in better condition for appeal. The proposed amendments do not raise new issues or necessitate a new search by the Examiner, since the amendment simply replaces existing material. Entry of this Amendment would also permit the Applicants to respond to new arguments raised in the final rejection.

Drawings

New Replacement Figs. 1 and 2 at higher resolution are provided herewith. These are the same drawings but are being retransmitted to the Patent Office at the highest possible scanning resolution since the Examiner indicated the resolution of the prior submission was not adequate. Upon request, the Applicants will submit these drawings as an artifact should the resolution as scanned and received not be adequate. Accordingly, the Applicants respectfully request withdrawal of this drawing objection.

Rejection—35 U.S.C. §112, second paragraph

Claims 14-26, 37 and 38 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite because dependent claim 18 "further comprises" application to a plastic surface. The use of the phrase "further comprises" is conventional, MPEP 608.01(n)

expressly indicates that the phrase "further comprising" is acceptable when it further limits an independent claim and 37 C.F.R. §1.75(c) expressly permits a dependent claim to refer back and further limit an independent claim:

"(c) One or more claims may be presented in dependent form, referring back to and further limiting another claim or claims in the same application."

Here, claim 18 clearly further limits independent claim 14, because it requires application to a plastic surface in addition to application to "a stone, bricks, concrete or plaster surface" or "a sandwich-type plaster board, joints, paper-based wall papers, or mineral paint" surface that the method further comprise application to a plastic surface. Therefore, the language of the rejection claim is definite and this rejection cannot be maintained. Upon withdrawal of this rejection, claims 14-26, 37 and 38, which were not rejected over the prior art, will be in condition for allowance.

Rejection—35 U.S.C. §102

Claims 27-30, 35, 39, and 40 were rejected under 35 U.S.C. §102(b) as being anticipated by Maekawa, et al., JP 8-165208. This rejection cannot be sustained because as acknowledged by the Examiner on page 3 of the OA, lines 3-5 of the rejection, Maekawa does not apply the spray composition "to the surface of a sandwich-type plaster board, joints, paper-based wall papers, or mineral paint" as required by claim 27. Rather, in Maekawa the composition "is used to mildewproof a plastic pipe material". Maekawa, paragraph [0023] refers to "product made from the plastic in a pipe". The teachings of Maekawa relied upon by the Examiner do not disclose a composition applied to the surfaces required by independent claim 27 and thus do not disclose of all the elements of the invention.

On the other hand, independent claim 27 requires that "said composition **has been applied** to a stone, concrete, bricks, or plaster surface; or. . .said dispersion **has been applied**

to the surface of a sandwich-type plaster board, joints, paper-based wall papers, or mineral paint (emphasis added)".

Secondly, this rejection cannot be sustained because the Examiner has not explained why the Maekawa composition *necessarily* contains "0.1 to 10% by weight of hydrophobic particles having a mean particle diameter of from 0.005 to 5 μm , an irregular fine structure ranging from 1 nm to 1,000nm, wherein elevations on the particles have an aspect ratio greater than 1" as required by the rejected claims. As set forth by MPEP 2112,

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is *necessarily* present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.

Consequently, for each of these reasons, Maekawa cannot anticipate the present claim and this rejection cannot be sustained.

Rejection—35 U.S.C. §102

Claims 27, 30-36, 39 and 40 were rejected under 35 U.S.C. §102(b) as being anticipated by Keller, et al., U.S. 2002/0016433. The Examiner has not provided the necessary rationale to sustain this anticipation rejection. Here, the Examiner has not explained why the Keller composition *necessarily* contains "0.1 to 10% by weight of hydrophobic particles having a mean particle diameter of from 0.005 to 5 μm , an irregular fine structure ranging from 1 nm to 1,000nm, wherein elevations on the particles have an aspect ratio greater than 1". While page 3, last line of the OA refers to a particle size of 1

micron, the Examiner has not established support in Keller for a *mean particle size range* of 0.005 to 5 μm . As set forth by MPEP 2112,

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). **"To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill."**

Page 4, lines 5-8 of the OA presumes that aspect ratio and irregular fine structures "are inherent properties of particles" and states that these properties correlate with the surface area of the particles. However, as indicated at the top of page 12 of the specification different types of particles have different aspect ratios¹. The Examiner has not explained why the prior art particles *necessarily* have an aspect ratio of > 1 .

Additionally, while paragraph [0070] broadly refers to "all conventional surfaces", it does not describe the surfaces required by claim 27 with sufficient specificity to anticipate the combination of the composition of the invention and the types of surfaces required by claim 27, nor does this reference recognize that application of the specific composition of the invention would suppress mold formation on these particular surfaces.

Since, the Examiner has not established that the prior art particles meet either the *mean* particle size range or the >1 *aspect ratio* required by the invention or that the prior art discloses with sufficient specificity applying the composition of the invention to the substrates required by claim 27, this anticipation rejection cannot be sustained.

¹ The aspect ratio of the elevations of the particles is defined as the quotient of maximum height and maximum width of the elevation, specification page 12, first paragraph.

Rejection—35 U.S.C. §102

Claims 35 and 36 were rejected under 35 U.S.C. §102(a) or (b) as being anticipated by Nun, et al., Macromol. Symp. 187:677-682. Nun discloses a Plexiglass Lotus-Effect surface which is not the same as the surface required by claims 35 and 36. Claim 35 depends from claim 27 and includes all its limitations. These limitations define the term “said surface” as used in claim 35 (and in claim 36, which depends from claim 35) as one which is a “stone, concrete, bricks, or plaster surface” or a “surface of a sandwich-type plaster board, joints, paper-based wall papers, or mineral paint”.

On the other hand, as indicated on page 4, lines 15-16 of the OA, “Nun et al. discloses a self-cleaning Lotus-Effect® surface on Plexiglass®”, see also the last paragraph on page 679 which describes a coating system “with an excellent adhesion to most of the common polymer surfaces” and Fig. 3 depicting an SEM image of self-cleaning Plexiglass®. Consequently, this rejection cannot be sustained because the Nun surface is Plexiglass and not one of the surfaces required by claims 27 or 35.

Rejection—35 U.S.C. §102

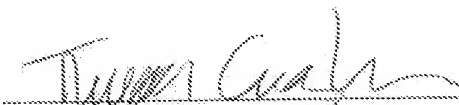
Claims 35 and 36 were rejected under 35 U.S.C. §102(f) by reference to Nun, et al., Macromol. Symp. 187:677-682 because Applicant allegedly did not invent the subject matter. As discussed above, the Nun Plexiglass lotus-effect surface is not the same as the lotus-effect surface of claims 35 and 36 which requires a “stone, concrete, bricks, or plaster surface” or a “surface of a sandwich-type plaster board, joints, paper-based wall papers, or mineral paint”. On the other hand, as indicated on page 4, lines 15-16 of the OA, “Nun et al. discloses a self-cleaning Lotus-Effect® surface on Plexiglass®”. Consequently, this rejection cannot be sustained.

Conclusion

This application presents allowable subject matter and the Examiner is respectfully requested to pass it to issue. The Examiner is kindly invited to contact the undersigned should a further discussion of the issues or claims be helpful.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
Norman F. Oblon



Thomas M. Cunningham, Ph.D.
Registration No. 45,394

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/07)